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ABSTRACTP. Q.  
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A method of analyzing a communication network ~~comprising determining~~ <sup>THAT DETERMINES</sup> a mean drop rate in a device x by polling each device from a network management computer (NMC) which is in communication with the network, and processing signals in the NMC to determine a drop rate  $D(x)$ , in accordance with:

$$D(x) = ((L+(x)-L-(x))/2,$$

$$\text{and } L(x) = 1-A(x)$$

where

$A(x)$ : the fraction of poll requests from the NMC to device x for which the NMC receives replies (measured over the last M sampling periods), (wherein x must not be broken),

$D(x)$ : the mean frame drop rate in device x,

$L(c)$ : NMC's perception of the loss rate to device x and back,

$L-(x)$ : the NMC's perception of the mean value of  $L(z)$  for all devices z connected to device x, closer to the NMC than device x and which are not broken, and

$L+(x)$ : the NMC's perception of the mean value of  $L(z)$  for all devices z connected to device x, further away from the NMC than device x and which are not broken.

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